

Hajime KONDOU
Appln. No. 10/509,034
Amendment Under 37 CFR 1.111

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A natural rubber which is obtained by a deproteinizing treatment of a natural rubber latex and has a total nitrogen content adjusted in a range of 0.12 to 0.30% by weight, and

which is obtained by coagulating the natural rubber latex obtained after the deproteinizing treatment without separation of non-rubber components by centrifugation and drying a product of the coagulation.

2. (canceled).

3. (currently amended): A natural rubber according to ~~any one of Claims 1 and 2~~ Claim 1, which has a Mooney viscosity (ML₁₊₄) and a stress relaxation time (T₈₀) satisfying following equations I and II:

$$40 \leq \text{ML}_{1+4} \leq 100 \quad \dots \text{I}$$

$$T_{80} < 0.0035 \exp(\text{ML}_{1+4}/8.2) + 20 \quad \dots \text{II}$$

wherein ML₁₊₄ is a Mooney viscosity measured at 100°C and T₈₀ is a period of time (second) from a time immediately after the measurement of ML₁₊₄ when rotation of a rotor is stopped to a time when ML₁₊₄ has decreased by 80%.

4. (previously presented): A rubber composition which comprises a natural rubber described in Claim 1 and a filler.

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5. (original): A rubber composition according to Claim 4, which comprises as the filler 20 to 100 parts by weight of carbon black having a specific surface area by nitrogen adsorption of 80 m²/g or greater or a DBP absorption of 110 ml/100 g or smaller per 100 parts by weight of a rubber component comprising the natural rubber.

6. (original): A rubber composition according to Claim 4, which comprises as the filler 20 to 80 parts by weight of silica per 100 parts by weight of a rubber component comprising the natural rubber.

7. (original): A rubber composition according to any one of Claims 4 to 6, which comprises 5% by weight or more of the natural rubber based on an entire amount of a rubber component.

8. (original): A process for producing a natural rubber which comprises partially deproteinizing a natural rubber latex in a step of deproteinizing the natural rubber latex so that a total nitrogen content in a solid component is adjusted in a range of 0.12 to 0.30, coagulating an obtained natural rubber latex without separation of non-rubber components and drying a product of the coagulation.

9. (currently amended): A rubber composition for tire case members which comprises a natural rubber described in Claim 1.

10. (original): A rubber composition for tire case members according to Claim 9, wherein the tire case member is an inner member of a tire.

11. (original): A tire case member which is obtained by using a rubber composition described in any one of Claims 9 and 10.

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12. (original): A tire case member according to Claim 11, wherein the rubber composition is used as a skim stock for a belt or a carcass.
13. (previously presented): A rubber composition for tire treads which comprises a rubber component comprising a natural rubber described in Claim 1 and a filler.
14. (original): A rubber composition for tire treads according to Claim 13, wherein the filler is at least one filler selected from carbon black and silica.
15. (previously presented): A tire tread which uses a rubber composition described in Claim 7.
16. (original): A pneumatic tire which uses a rubber composition described in Claim 5 for a constituting member of the tire.
17. (original): A pneumatic tire which uses a rubber composition described in Claim 6 for a constituting member of the tire.
18. (previously presented): A pneumatic tire which comprises a tire case member described in Claim 11.
19. (original): A pneumatic tire which comprises a tire tread described in Claim 15.
20. (new): A natural rubber according to claim 1, which is obtained by partially deproteinizing treatment of the natural rubber latex.